## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Alexander B. BEAMAN Attorney Docket No.: APL1P283/P3109

Application No.: 10/623,339 Examiner: Steven B. Theriault

Filed: July 18, 2003 Group: 2179

Title: VOICE MENU SYSTEM Confirmation No.: 3294

## **DECLARATION UNDER 37 CFR § 1.131**

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

- I, Alexander Beaman, do hereby declare:
- I am the inventor of the subject matter claimed in the above-referenced patent application.
- 2. I invented the subject matter recited in the present application prior to May 27, 2003, as evidenced by my submission on March 3, 2003 of an invention disclosure entitled Voice menu system for portable MP3 player(iPod) to the online patent disclosure repository maintained by my employer at that time, Apple Computer, Inc. A copy of the entry and a cover sheet is attached to this declaration. The date of submission is evidenced by the cover sheet.
- 3. All of the features of the above-reference patent application are described in the invention disclosure which is sufficiently detailed to evidence not only the conception of the invention, but to allow one of ordinary skill in the art to reduce the invention to practice as well.
- 4. In addition, subsequent to the submission to Apple's online patent disclosure repository, due diligence was exercised in the preparation and filing of the present application on July 18, 2003. Specifically, I worked with Doug Thomas of Beyer, Weaver & Thomas on the preparation of a patent application. It is my understanding that Mr. Thomas was asked by Apple

on May 20, 2003 to prepare the patent application. This is evidenced by a letter from Richard Liu, Patent Counsel for Apple to Mr. Thomas, a copy of which is attached to this declaration.

- 5. It my further understanding that between March 3, 2003 and May 20, 2003, Apple's patent review committee was diligently evaluating the proposed idea to determine whether to file a patent application on it. Once that determination was made, it is my understanding that Mr. Thomas was contacted to prepare the application. I worked with Mr. Thomas on the preparation of the patent application once he began working on it.
- All of the work relating to the conception and reduction to practice of the invention was performed in the United States.
- 7. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Date: 10/10/07

Signature Millimin Alexande Reamon

## Patent Committee Cover Sheet Privileged and Confidential

Title Voice Menu System

Inventor(s) Alexander Beaman

Docket Number P3109

Project/Code Name

Product iPod, iTunes

Summary

iTunes is used first to compress the spoken (text-to-speech) names of the playlists, artists, songs before downloading them to an iPod. The iPod will provide audible output for menu selection using the compressed information. Control features may also be implemented using audio output. Furthermore, the voice menu system may also be used on iPod's remote control device.

The claims may include a combination of speakable items generated on a system and downloaded (automatically) for use in another system.

Client Special Projects

Rating (A-C) B Attorney Comments

This may also be considered a disability solution.

Date Disclosure Received 3/3/2003 Earliest Possible Disclosure Bar Information

Keywords Multimedia: Peripheral

Attorney Liu Type Utility

## **≰**<sub>∞</sub> Inventio<sub>11</sub> Disclosure

1. Give the title of your invention:

viewable).

Voice menu system for portable MP3 player (iPod).

(for use by blind users or when using a remote control when the unit's screen is not

2. Give a brief description of your invention here, but also include a thorough description of your invention, using attached sheets as necessary. Include sketches or drawings (flow-charts for software) which illustrate your invention, any formulas and/or descriptions of equipment necessary to implement your idea, and the preferred manner in which your invention would be implemented:

Portable MP3 music players, like Apple's iPod, allow users to bring a lot of music with them wherever they go. The iPod's user interface and menu system helps the user navigate a potentially large library of songs, presenting various hierarchical menus for classifying and identifying artists, albums, playlists, and individual songs. A recent addition to the product was a remote control located on the earpiece wire which allows simple control of song playback functions. It is limited to fast-forward or rewinding a track, play, pause and adjusting volume. It does not allow the user to navigate to another playlist or other level in the library hierarchy, mainly because the user needs to view the screen to make selections for navigation.

Blind users are not able to reap the benefits of the iPod because they cannot see the screen to make navigation choices. While desktop computer operating systems have features to aid blind users in using the machines (e.g. text to speech), the iPod does not and the promise of the Digital Hub, at least for audio, is unfulfilled.

The subject of this invention disclosure is s system that will permit a blind user or a user of a tethered remote, to navigate the interface with the aid of spoken menus so that viewing the screen is not necessary.

The system consists of three main parts:

Part 1: Features added to the iTunes application

To permit the iPod to speak the name of a playlist, Album, artist, or song added to the iPod, the user would use the iTunes application to generate the spoken name for the item. By default, these names could be generated using the computer's built-in text-to-speech capabilities. The user could also record a voice notation to either correct or customize the default spoken item. When the iPod is synchronized with the music library, iTunes would also download the voice annotations which would be stored in a highly compressed for to minimize their storage requirements (speech can be compressed much more than music).

Part 2: Spoken menu feedback via the audio output of the iPod

The iPod would come with built-in speech equivalents for all of the standard menu items in its interface.

Spoken Menu Feedback would be a new setting the user would make within the iPod's Settings menu. Its possible states would be "Off", "Left" (to play the menu voice only through the left channel), "Right", or "Both" (voice would play through both channels mixed with any playing music). Additional settings for this feature could include controlling the speed or volume of the spoken items.

As the user presses the Menu button, Select button or moves the scroll wheel, the item the interface cursor lands on is described through the earpiece. The voice feedback would be played after a slight pause so as not to generate a flurry of speech while scrolling through a list with the scroll wheel.

This voice feedback mechanism would also permit other features, such as low battery warning.

Part 3: An enhanced tethered remote control

+ switch(es) to control if and where voice feedback is played

+ A button to have the iPod repeat the last voiced item.

+ equivalent of .ect and Menu buttons for navigation a. "up" and "down" buttons to mimic the iPod's scroll wheel.

3a. Describe any existing products, methods, or external publications (prior art) that you are presently aware of which relate to your invention:

Apple iPod and iTunes software

3b. State in detail the advantages that your invention has over this prior art and how your invention is distinguished from this prior art:

This invention adds features to the iPod and iTunes products

- 4. Attach and identify copies of all known drawings, sketches, descriptions, data, articles, etc., of your invention. (Be sure to include dated and witnessed copies of your lab notebook.)
- 5. Give names of other persons familiar with or who have worked on the project (please identify the project or intended product): -NONE-

Inventor(s) Signature(s):

Complete Legal Name of Inventor(s) (Include Middle Initial) Alexander B. Beaman

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Witnessed & Understood By (include date):

THIS FORM IS APPLE NEED-TO-KNOW CONFIDENTIAL DATA WHEN FILLED IN. Please send the completed form to Al Cefalo, Director, Apple Patents & Trademarks, Apple Computer, Inc., Law Department, M/S 38-PAT, 10431 N. DeAnza Blvd., Cupertino, CA 95014.

01/28/99

May 20, 2003



VIA FEDERAL EXPRESS

Doug Thomas Beyer, Weaver & Thomas, LLP 590 W. El Camino Real Mountain View, CA 94040

> Re: Quote for Preparation of Patent Application Apple's Ref. No.: P3109

Dear Doug:

Attached are copies of the disclosure material for P3109, "Voice Menu System". Please note that a search should be done for further discussion before application drafting.

Please review the file and provide us an initial estimate of the cost for preparing the application and a sample claim or abstract using the attached form. Please return the form with the sample claims to us within two weeks. After the forms are received and reviewed, we will authorize you to proceed with the preparation of the application.

After preparation is authorized, we expect the case to be completed all in accordance with the instructions set forth in our outside counsel guidelines. All cases should be filed with an executed declaration and assignment.

Please contact me after you have had a chance to review the disclosure to discuss the time frame in which this case should be prepared and filed.

Sincerely,

APPLE COMPUTER, INC.

Richard C. Liu Patent Counsel

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RCL/jd

Encls.

